



State of Utah

Department of
Environmental Quality

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Executive Director

DIVISION OF AIR QUALITY
Richard W. Sprott
Director

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DAQE-IN0263004-06

September 12, 2006

Alvaro Parra, Ph.D.
Enterprise Products Operating, LP
P.O. Box 4324
Houston, Texas 77210

Dear Dr. Parra:

Re: Intent to Approve: Modification to DAQE-986-93 by Replacing Existing Turbines, Grand
County – CDS B; ATT; NSPS; HAPs; TITLE V Minor
Project Code: N0263-004

The attached document is the Intent to Approve (ITA) for the above-referenced project. ITAs are subject to public review. Any comments received shall be considered before an Approval Order is issued.

Future correspondence on this Intent to Approve should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Tim De Julis. He may be reached at (801) 536-4012.

Sincerely,

Tim Blanchard, Acting Manager
Minor New Source Review Section

TB:TDJ:kw

cc: Southeastern Utah District Health Department

Mike Owens, EPA Region VIII

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**INTENT TO APPROVE: Modification to
DAQE-986-93 by Replacing Existing
Turbines**

**Prepared By: Tim De Julis, Engineer
(801) 536-4012
Email: tdejulis@utah.gov**

INTENT TO APPROVE NUMBER

DAQE-IN0263004-06

Date: September 12, 2006

Mid-America Pipeline Company

**Source Contact
Dr. Alvaro Parra
(713) 880-6957**

**Richard W. Sprott
Executive Secretary
Utah Air Quality Board**

Abstract

Mid-America Pipeline Company (MAPCO), subsidiary of Enterprise Products Operating, LP, owner and operator of the turbine natural gas liquids pumping station located near Harley Dome, Grand County has requested permission to modify the existing operation. MAPCO seeks to replace the three existing 1,000 horsepower turbines with two 1,400 horsepower turbines. Two methanol storage tanks that have been used since the project started but not included in the equipment list will be listed. Grand County is an attainment area of the National Ambient Air Quality Standards (NAAQS) for all pollutants. New Source Performance Standards (NSPS) apply to this source (40 CFR 60 Subpart A, and Subpart KKKK). National Emission Standards for Hazardous Air Pollutants (NESHAP) and Maximum Achievable Control Technology (MACT) regulations do not apply to this source. Title V of the 1990 Clean Air Act applies to this source. This minor source does not require a Title V operating permit.

The emissions, in tons per year, will change as follows:

PM₁₀ (- 0.27), NO_x (- 4.34), SO₂ (- 0.14), CO (+ 2.03), VOC (+ 2.05), HAPs (- 0.04)

The changes in emissions will result in the following, in tons per year, potential to emit totals:

PM₁₀ = 0.87, NO_x = 52.56, SO₂ = 0.45, CO = 38.38, VOC = 8.91, HAPs = 0.14

The Notice of Intent (NOI) for the above-referenced project has been evaluated and has been found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an Approval Order (AO) by the Executive Secretary of the Utah Air Quality Board.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notice of intent to approve will be published in the Times Independent Printing on September 14, 2006. During the public comment period the proposal and the evaluation of its impact on air quality will be available for both you and the public to review and comment. If anyone so requests a public hearing it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated.

Please review the proposed AO conditions during this period and make any comments you may have. The proposed conditions of the AO may be changed as a result of the comments received. Unless changed, the AO will be based upon the following conditions:

General Conditions:

1. This Approval Order (AO) applies to the following company:

Corporate Office Location

Mid-America Pipeline Company, LLC
PO Box 4234
Houston, Texas 77210-4234

Phone Number (713) 880-6957

Fax Number (801) 880-6660

The equipment listed in this AO shall be operated at the following location:

Remote location near Harley Dome, Grand County

Directions to site

Located on 1-70 near Harley Dome. Take Exit 225 (Westwater Exit). The Station is south of the interstate on the service road.

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD 1927
4,336.89 kilometers Northing, 661.87 kilometers Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307) and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.
4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved in accordance with R307-401.
5. All records referenced in this AO or in the applicable NSPS, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request. All records shall be kept for a minimum five year period.
6. MAPCO shall install and operate the two new turbine compressor engines and shall conduct its operations of the Harley Dome natural gas pump station in accordance with the terms and conditions of this AO, which was written pursuant to MAPCO's Notice of Intent submitted to the Division of Air Quality (DAQ) on April 24, 2006, and additional information submitted to the DAQ on June 26, 2006, August 11, 2006, and August 22, 2006.
7. This AO shall replace the portion of the AO (DAQE-986-93) dated November 5, 1993 that references the Harley Dome natural gas liquids pumping station.
8. The approved installations shall consist of the following equipment (or equivalent*):
 - A. Two (2) Turbine Compressor Engines 40 CFR 60 Subpart KKKK

Site Rating:	1,399 hp (14,980,000 Btu/hr) – each
Fuel Type:	Natural Gas
 - B. Two (2) Storage Tanks

Service:	Methanol
Capacity:	500 gallons, and 100 gallons

C. One (1) Flare

* Equivalency shall be determined by the Executive Secretary.

9. MAPCO shall notify the Executive Secretary in writing when the installation of the equipment listed in Condition #8 has been completed and is operational, as an initial compliance inspection is required. To insure proper credit when notifying the Executive Secretary, send your correspondence to the Executive Secretary, attn: Compliance Section.

If the construction and/or installation are not complete within eighteen months from the date of this AO, the Executive Secretary shall be notified in writing on the status of the construction and/or installation. At that time, the Executive Secretary shall require documentation of the continuous construction and/or installation of the operation and may revoke the AO in accordance with R307-401-18.

Limitations and Tests Procedures

10. Emissions to the atmosphere at all times from the indicated emission point(s) shall not exceed the following rates and concentrations:

Source: Turbine Compressor Engine Exhaust Stacks

<u>Pollutant</u>	<u>lb/hr</u>	<u>ppmdv</u> (15% O ₂ dry)
NO _x	6.00.....	100.00
CO	4.38.....	120.00

11. Stack testing to show compliance with the emission limitations stated in the above condition shall be performed as specified below:

A.	<u>Emissions Point</u>	<u>Pollutant</u>	<u>Testing Status</u>	<u>Test Frequency</u>
	Turbine Compressor Exhaust Stacks	NO _x	*	@
		CO	*	#

B. Testing Status

* Initial compliance testing is required. The initial test date shall be performed as soon as possible and in no case later than 180 days after the start up of a new emission source. A compliance test is required on the emission point that has an emission rate limit.

@ Compliance test as per the schedule contained in 40 CFR 60 Subpart KKKK, subsequent to the initial compliance test. The Executive Secretary may require testing at any time.

- # Compliance test at least once every five years, subsequent to the initial compliance test. The Executive Secretary may require testing at any time.

C. Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

The source test protocol shall be approved by the Executive Secretary prior to performing the test(s). The source test protocol shall outline the proposed test methodologies, stack to be tested, and procedures to be used. A pretest conference shall be held, if directed by the Executive Secretary.

D. Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.

E. Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or other testing methods approved by the Executive Secretary.

F. Nitrogen Oxides (NO_x)

40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, 7E, or other testing methods approved by the Executive Secretary.

G. Carbon Monoxide (CO)

40 CFR 60, Appendix A, Method 10, or other testing methods approved by the Executive Secretary.

H. Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.

I. New Source Operation

For a new source/emission point, the engine loading, in terms of horsepower, during all USEPA method-testing shall be no less than 90% of the production rate

listed in this AO. If the production rate listed in this AO has not been achieved at the time of the test, then method-testing shall be conducted at no less than 90% of the maximum production rate achieved as of the date of the test.

J. Existing Source Operation

For an existing source/emission point, the production rate during all USEPA method-testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

12. Visible emissions from the following emission points shall not exceed the following values:

- A. The flare – No visible emissions
- B. All other points - 10% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

For sources that are subject to New Source Performance Standards (NSPS), opacity shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

Fuels

13. The owner/operator shall use natural gas and natural gas liquids¹ as fuel in the turbine pumping engines and the flare. The composition of the fuel shall be tested according to the schedule specified in 40 CFR 60 Subpart KKKK.

Federal Limitations and Requirements

14. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18 and Subpart KKKK, 40 CFR 60.4300 to 60.4420 (Standards of Performance for Stationary Combustion Turbines) apply to this installation.

Records & Miscellaneous

15. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this Approval Order, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on the information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and

¹ The composition of the natural gas liquids used as fuel in the combustion turbines is defined by analytical test results contained in the Notice of Intent for this modification.

maintenance procedures, and inspection of the source. All maintenance performed on the equipment authorized by this AO shall be recorded.

16. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
17. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site:

<http://www.airquality.utah.gov/>

The annual emissions estimations below include point source and fugitive emissions, and do not include fugitive dust, road dust, tail pipe emissions, or grandfathered emissions. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, non-attainment area, Maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for MAPCO's Harley Dome natural gas pump station are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	PM ₁₀	0.87
B.	SO ₂	0.45
C.	NO _x	52.56
D.	CO	38.38
E.	VOC	8.91
F.	HAPs	
	Total HAPs	0.14

The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final Approval Order.

Sincerely,

Tim Blanchard, Acting Manager
Minor New Source Review Section